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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,103	04/23/2001	William S. Malson	AMERICAN P-3	2973
25686	7590	06/17/2004		
CARGILL & ASSOCIATES, P.L.L.C. 56 MACOMB PLACE MT. CLEMENS, MI 48043				
			EXAMINER WACHTEL, ALEXIS A	
			ART UNIT 1764	PAPER NUMBER

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/830,103

Applicant(s)

MALSON ET AL.

Examiner

Alexis Wachtel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6-25-2001
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Detailed Action

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5,7-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4344824 to Soleau, Jr.

Claims 8-10,12 are given no patentable weight since said claims fail to lend structure to the claimed water dehumidification system.

With respects to claim 1, Soleau, Jr teaches a water dehumidification system comprising: a water vapor retaining container (1); a condenser (13) located within the water vapor retaining container for containing a liquid at a lower temperature than the water vapor, such that condensate forms on the outside of the condenser when water vapor is present and lower temperature liquid is in the condenser; and a collection trough under the condenser for gravitationally collecting the condensate which has sweated off the condenser thereby effecting dehumidification of the system (14).

Soleau, Jr as set forth above fails to teach the claimed dimensions of the water vapor retaining container. However, having employed the claimed height, width and length would have been considered an obvious matter of design choice and is consequently not found to be inventive.

Per claim 2: wherein the water vapor retaining container is a passively heated solar system (Col 1, lines 6-8).

Per claim 3: wherein the water vapor retaining is airtight (Col 2, line 17).

Per claim 4: wherein the condenser is made of pipe (Col 2, lines 42-43).

Per claim 5: wherein the condenser is made of a closed loop system of pipes (Fig.1).

Per claim 7: wherein the condenser is longitudinally oriented within an elongated water vapor retaining container (Fig.1).

With respect to claim 11, Soleau, Jr as set forth above fails to teach that the collection trough is of a V-shaped configuration. However, absent any showing of unexpected results associated with the use of a V-shaped trough, having employed a V-shaped trough instead of a U-shaped trough as disclosed by Soleau, Jr would have been an obvious matter of design choice.

Per claim 13: A passive solar water condensation system for processing non-potable water into potable water by condensing water vapor from contaminated water sources, comprising: an elongated passive solar water vapor retaining dehumidification container (1) to contain the non-potable water to be separated into potable water and residual sediment, said non-potable water to be put into a vapor phase by heating with solar energy; at least one condenser pipe (13) located within the water vapor retaining dehumidification container for receiving an incoming cold liquid at a lower temperature than the water vapor, such that condensate forms on the outside of the condenser when water vapor is present and lower temperature liquid is in the condenser; and a collection

trough (14) under the condenser for gravitationally collecting the condensate which has sweated off the condenser, forming purified water.

Soleau, Jr as set forth above fails to teach the claimed dimensions of the water vapor retaining container. However, having employed the claimed height, width and length would have been considered an obvious matter of design choice and is consequently not found to be inventive.

Per claim 15: further comprising a storage tank for storing the purified water collected from the dehumidification process (Col 2, lines 56-62).

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 4344824 to Soleau, Jr in view of US 4217881 to Brent.

With respects to claim 6, Soleau, Jr as set forth above fails to teach that the condenser is made of a pipe material selected from the group consisting of copper and aluminum. Brent teaches that any stainless type of tubing such as copper tubing can be used to make condenser tubes (Col 2, lines 18-24). In view of this teaching it would have been obvious to one of ordinary skill to have employed copper tubing for making the condenser tube since it is established by Brent that such a material is functionally suitable for such an application.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 4344824 to Soleau, Jr in view of US 5,873,996 to Rozelle et al.

With respects to claim 14, Soleau, Jr as set forth above fails to teach the use of a pre-treatment pond for pre-cleaning the non-potable water which is received by the dehumidification container. Rozelle is directed to water purification systems and

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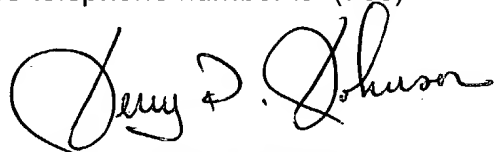
teaches a system that draws water from source of water by a suction pump into an intake hose whose end portion is protected by a screen to prevent larger objects such as twigs and leaves from entering the intake hose (Col 3, lines 23-29). Since the water dehumidification system disclosed by Soleau, Jr requires a source of water to operate, it would have been obvious to have drawn water for the dehumidification system's operation from a body of water and to have provided water drawing means with a screen to prevent intake of large foreign fouling particles. One of ordinary skill would have been motivated by the desire to improve the working life of the dehumidification system.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alex Wachtel, whose number is (703)-306-0320. The Examiner can normally be reached Mondays-Fridays from 10:30am to 6:30pm.

If attempts to reach the Examiner by telephone are unsuccessful and the matter is urgent, the Examiner's supervisor, Mr. Glenn Caldarola can be reached at (703) 308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



JERRY D. JOHNSON
PRIMARY EXAMINER
GROUP 1100

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